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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/809,309	03/16/2001	Carl Dionne	ATKINSON	5396

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EXAMINER

KENDALL, CHUCK O

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/809,309	Applicant(s) DIONNE ET AL.	
	Examiner Chuck Kendall	Art Unit 2122	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05/28/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner: _____
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is in response to the application filed 05/28/04.
2. Claims 1 – 22 have been examined, and claim 23 has been cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 – 21 are rejected under 35 U.S.C. 103(a) as unpatentable over Pham et al. USPN 5,524,253 (hereinafter "Pham") art of record, in view of Bannon et al. USPN 5,297,279 art being made of record and further in view of Snyder et al. USPN 6,640,255 B1 art of record.

Regarding claim 1, Pham discloses an apparatus comprising visual display means, processing means, storage means and memory means (Col.7: 8, see computer) wherein said memory means is configured to store program instructions for describing objects for use in object-oriented programming; said memory means is configured to store said executable instructions set and said described objects (Col.15: 50 – 55, see Library and executed at runtime); and

said processing means is configured by said executable instructions set to manage the duplication of said described objects (Col.29: 2 – 7).
and for the compiling thereof within an instructions set executable by said network-connected terminals, wherein each of said network-connected terminals is equipped

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with visual display means, processing means, storage means and memory means (FIG. 3, see APPLICATION ADAPTOR 1 AND SYSTEM A). Although, Pham doesn't disclose an object oriented language, he does disclose the use of C which is an older version but however, very similar to the C++ language, which is an object oriented language. Bannon does disclose the use of an object oriented language for example, C++, in an analogous art, further stating " The DDL module accepts object type description on standard C++ programming language statements...and extracts sufficient information from the description to enable the OTS module to translate objects between their primary and secondary memory representations". Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine Pham and Bannon because, using an object oriented language for example C++ would enable more efficient and compatible translations using the DDL.

Pham and Bannon doesn't explicitly disclose ASCII instructions. However, Snyder does disclose this feature in an analogous art (Col.15: 26 – 33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pham and Bannon with Snyder, because ASCII text files enable compilers to process the developer's code.

Regarding claim 2, apparatus according to claim 1, wherein said program instructions comprise a programming application including a linker (Pham, Col.4: 7 – 11), a Data Definition Language compiler (Pham, Col.10: 38), a Higher Level Programming Language compiler (Pham, Col.3: 47 – 50), a Data Definition Language library (Pham, Col.7: 57) and one or a plurality of Higher Level Programming Language libraries (Pham, Col.18: 60 – 63).

Regarding claim 3, Pham discloses all the claimed limitations as applied in claim 1 above. Pham doesn't explicitly disclose wherein said objects are described using a hierarchy of Data Definition Language classes and Higher Level Programming Language classes. However, Snyder does disclose this functionality in an analogous art (Snyder, Col.4: 5 – 10). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Pham and Snyder,

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because using class hierarchies to define the objects would enable the system to be more distributed.

Regarding claim 4, apparatus according to claim 3; as previously discussed per use of classes, Snyder further discloses wherein said Higher Level Programming Language classes inherit from said Data Definition Language classes (Snyder, Col.4: 5 – 10, note the object interface is a Definitions Language, see 5:63 and 15: 60 - 67).

Regarding claim 5, apparatus according to claim 1; as previously discussed per use of ASCII instructions, Snyder further discloses wherein said Higher Level Programming Language classes and said Data Definition Language classes are declared by means of said ASCII instructions inputted in said programming application (Snyder, Col.15: 27 – 16: 22).

Regarding claim 6, the apparatus according to claim 1, wherein said Data Definition Language classes include instructions for sharing said described objects by a plurality of network-connected terminals over a network (Pham, FIG 3, see SYSTEM A, APPLICATION A and APPLICATION B, which both share by interfacing through adaptor 1 or 2).

Regarding claim 7, apparatus according to claim 1, wherein said network-connected terminals are known as platforms and described objects are simultaneously shared by a plurality of different platforms operating with different operating systems respectively (Pham, col.7: 7 – 20).

Regarding claim 8, apparatus according to claim 1, wherein the first generation of said executable instructions set can be tested by said a plurality of network-connected terminals over said network (Pham, Col.13: 49 – 47).

Regarding claim 9, apparatus according to claim 1, wherein said described objects are known as duplicated objects (Pham, Col.29: 2 – 7, see copying).

Regarding claim 10, apparatus according to claim 1 wherein said executable instructions set instantiates one or a plurality of said duplicated objects in the local memory means (Pham, Col.29: 2 – 7, see copying) of said a network-connected terminal and publishes said one or a plurality of said duplicated objects to remote

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memory means when executed by said network-connected terminal (Pham, Col.7: 57 – 60, see copy files and send messages through adaptor).

Regarding claim 11, which discloses the method version of claim 1, see rationale above as previously discussed.

Regarding claim 12, which discloses the method version of claim 2, see rationale above as previously discussed.

Regarding claim 13, which discloses the method version of claim 3, see rationale above as previously discussed.

Regarding claim 14, which discloses the method version of claim 4, see rationale above as previously discussed.

Regarding claim 15, which discloses the method version of claim 5, see rationale above as previously discussed.

Regarding claim 16, which discloses the method version of claim 6, see rationale above as previously discussed.

Regarding claim 17, which discloses the method version of claim 7, see rationale above as previously discussed.

Regarding claim 18, which discloses the method version of claim 8, see rationale above as previously discussed.

Regarding claim 19, which discloses the method version of claim 9, see rationale above as previously discussed.

Regarding claim 20, which discloses the method version of claim 10, see rationale above as previously discussed.

Regarding claim 21, which discloses the computer readable medium version of claim 1, see rationale above as previously discussed.

Regarding claim 22, Pham discloses a computer-readable memory system having computer-readable data stored therein, comprising one or a plurality of object one or a plurality of user-defined files (Col.7: 51); program instructions including a linker (Col.4: 7 – 11); a Data Definition Language compiler (Col.10: 38); a Higher Level Programming Language compiler (Col.3: 47 – 50); a Data Definition Language library

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(Col.7: 57); and one or a plurality of Higher Level Programming Language libraries (Col.18: 60 – 63) wherein said program instructions are configured to describe files to be shared by a plurality of network-connected terminals over a network by means of ASCII instructions; and compile said ASCII instructions with an instruction set executable by said network-connected terminals (Col.15: 50 – 55, see Library and executed at runtime). Although, Pham doesn't disclose objects associated with an object oriented language and also class definition files and one or a plurality of object class description files and describing objects, he does disclose the use of C which is an older version but however, very similar to the C++ language, which is an object oriented language. Bannon does disclose the use of an object oriented language for example, C++, in an analogous art, further stating " The DDL module accepts object type description on standard C++ programming language statements...and extracts sufficient information from the description to enable the OTS module to translate objects between their primary and secondary memory representations", as well as class definition files and one or a plurality of object class description files and describing objects, (see FIG.3, and FIG.4). Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to combine Pham and Bannon because, using an object oriented language for example C++ would enable more efficient and compatible translations using the DDL.

Response to Arguments

5. Applicant's arguments with respect to claim 05/28/2004 have been considered but are moot in view of the new ground(s) of rejection.

Correspondence Information


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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuck Kendall whose telephone number is 703-3086608. The examiner can normally be reached on 10:00 am - 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Dam can be reached on 703-3054552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CK.



WEI Y. ZHEN
PRIMARY EXAMINER